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FEB 13 2002

TECH CENTER 1600/2900



1600

1644

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/491,146A

DATE: 02/04/2002
TIME: 13:37:23

Input Set : A:\W121280.txt
Output Set: N:\CRF3\02042002\I491146A.raw

ENTERED

3 <110> APPLICANT: The Government of the United States of America, as represented by
4 the Secretary, Department of Health and Human Services,
5 c/o Centers for Disease Control and Prevention
6 Khudyakov, Yury
7 Fields, Howard
9 <120> TITLE OF INVENTION: MOSAIC PROTEIN AND RESTRICTION ENDONUCLEASE ASSISTED
10 LIGATION METHOD FOR MAKING THE SAME
12 <130> FILE REFERENCE: 14114.0344U2
14 <140> CURRENT APPLICATION NUMBER: 09/491,146A
C--> 15 <141> CURRENT FILING DATE: 2000-01-25
17 <150> PRIOR APPLICATION NUMBER: 08/921,887
W--> 18 <151> PRIOR FILING DATE: 25-08-97
20 <160> NUMBER OF SEQ ID NOS: 55
22 <170> SOFTWARE: FastSEQ for Windows Version 4.0
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 55
26 <212> TYPE: DNA
27 <213> ORGANISM: Hepatitis C virus
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29 ccccgaaattc aaccgaaacc gcaacgtaaa accaaacgta acaccattcg tcgtc 55
31 <210> SEQ ID NO: 2
32 <211> LENGTH: 69
33 <212> TYPE: DNA
34 <213> ORGANISM: Hepatitis C virus
W--> 35 <400> SEQUENCE: 2
36 ccccgatcc tatttcggac caacgatctg accaccaccc ggaaatttaa cgtcctgcgg 60
37 acgacgaat 69
39 <210> SEQ ID NO: 3
40 <211> LENGTH: 54
41 <212> TYPE: DNA
42 <213> ORGANISM: Hepatitis C virus
W--> 43 <400> SEQUENCE: 3
44 ccccgaaattc aaccgaaacc gcaacgtcag accaaacgta acaccaaccc tcgt 54
46 <210> SEQ ID NO: 4
47 <211> LENGTH: 70
48 <212> TYPE: DNA
49 <213> ORGANISM: Hepatitis C virus
51 <400> SEQUENCE: 4
52 ccccgatcc tatttcggac caacgatctg accaccaccc ggaaatttaa cgtcctgcgg 60
53 acgacggat 70
55 <210> SEQ ID NO: 5
56 <211> LENGTH: 51
57 <212> TYPE: DNA

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/491,146A

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TIME: 13:37:23

Input Set : A:\WI21280.txt

Output Set: N:\CRF3\02042002\I491146A.raw

58 <213> ORGANISM: Hepatitis C virus
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 60 ccccgaaattc aaccgaaacc gcaacgtaaa accaaacgta acaccttaccg t 51
 62 <210> SEQ ID NO: 6
 63 <211> LENGTH: 73
 64 <212> TYPE: DNA
 65 <213> ORGANISM: Hepatitis C virus
 W--> 66 <400> SEQUENCE: 6
 67 ccccgatcc tatttcggac caacgatctg accaccaccc ggaaatttaa cgtcctgcgg 60
 68 acgacggtag gtg 73
 70 <210> SEQ ID NO: 7
 71 <211> LENGTH: 55
 72 <212> TYPE: DNA
 73 <213> ORGANISM: Hepatitis C virus
 W--> 74 <400> SEQUENCE: 7
 75 ccccgaaattc aaccgaaacc gcaacgtaaa ccgaaccgta acaccaaccc tcgtc 55
 77 <210> SEQ ID NO: 8
 78 <211> LENGTH: 69
 79 <212> TYPE: DNA
 80 <213> ORGANISM: Hepatitis C virus
 W--> 81 <400> SEQUENCE: 8
 82 ccccgatcc tatttcggac caacgatctg accaccaccc ggaaatttaa cgtcctgcgg 60
 83 acgacggtt 69
 85 <210> SEQ ID NO: 9
 86 <211> LENGTH: 63
 87 <212> TYPE: DNA
 88 <213> ORGANISM: Hepatitis C virus
 W--> 89 <400> SEQUENCE: 9
 90 ccccgaaattc aaccgaaacc gcaacgtcag ccgaaacgta acaccccgcg tcgtccgcag 60
 91 gac 63
 93 <210> SEQ ID NO: 10
 94 <211> LENGTH: 60
 95 <212> TYPE: DNA
 96 <213> ORGANISM: Hepatitis C virus
 W--> 97 <400> SEQUENCE: 10
 98 ccccgatcc tatttcggac caacgatctg accaccaccc ggaaatttaa cgtcctgcgg 60
 101 <210> SEQ ID NO: 11
 102 <211> LENGTH: 55
 103 <212> TYPE: DNA
 104 <213> ORGANISM: Hepatitis C virus
 W--> 105 <400> SEQUENCE: 11
 106 ccccgaaattc aaccgaaacc gcaacgtaaa accaaacgta acgctcaccg tcgtc 55
 108 <210> SEQ ID NO: 12
 109 <211> LENGTH: 69
 110 <212> TYPE: DNA
 111 <213> ORGANISM: Hepatitis C virus
 W--> 112 <400> SEQUENCE: 12
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 114 acgacggtg 69

RAW SEQUENCE LISTING DATE: 02/04/2002
 PATENT APPLICATION: US/09/491,146A TIME: 13:37:23

Input Set : A:\W121280.txt
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116 <210> SEQ ID NO: 13
117 <211> LENGTH: 55
118 <212> TYPE: DNA
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123 <210> SEQ ID NO: 14
124 <211> LENGTH: 69
125 <212> TYPE: DNA
126 <213> ORGANISM: Hepatitis C virus
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128 ccccgatcc tatttcggac caacgatctg accaccaccc gggaaatttaa cgtcctgcgg 60
129 acgacggtt 69
131 <210> SEQ ID NO: 15
132 <211> LENGTH: 55
133 <212> TYPE: DNA
134 <213> ORGANISM: Hepatitis C virus
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138 <210> SEQ ID NO: 16
139 <211> LENGTH: 69
140 <212> TYPE: DNA
141 <213> ORGANISM: Hepatitis C virus
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143 ccccgatcc tatttcggaa cgtagataac accaccaccc gggaaatttaa cgtcctgcgg 60
144 acgacgaaat 69
146 <210> SEQ ID NO: 17
147 <211> LENGTH: 56
148 <212> TYPE: DNA
149 <213> ORGANISM: Hepatitis C virus
151 <400> SEQUENCE: 17
152 ccccgaaattc aaccgaaacc gcaacgtaaa accgaaacgta acaccaaccg tcgtcc 56
154 <210> SEQ ID NO: 18
155 <211> LENGTH: 65
156 <212> TYPE: DNA
157 <213> ORGANISM: Hepatitis C virus
W--> 158 <400> SEQUENCE: 18
159 ccccgatcc tatttcggac caacgatctg accaccacca gagaaacgaa cgtccggacg 60
160 acggat 65
162 <210> SEQ ID NO: 19
163 <211> LENGTH: 54
164 <212> TYPE: DNA
165 <213> ORGANISM: Hepatitis C virus
W--> 166 <400> SEQUENCE: 19
167 ccccgaaattc aaccgaaacc gaaacgtcag accaaacgta acaccctgcg tcgt 54
169 <210> SEQ ID NO: 20
170 <211> LENGTH: 73
171 <212> TYPE: DNA
172 <213> ORGANISM: Hepatitis C virus
  
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Input Set : A:\W121280.txt
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W--> 173 <400> SEQUENCE: 20
 174 ccccgatcc tattcggac caacgatctg accaccagcc ggaaatttaa cgttttcgg 60
 175 acgacgacgc agg 73
 177 <210> SEQ ID NO: 21
 178 <211> LENGTH: 55
 179 <212> TYPE: DNA
 180 <213> ORGANISM: Hepatitis C virus

W--> 181 <400> SEQUENCE: 21
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 184 <210> SEQ ID NO: 22
 185 <211> LENGTH: 69
 186 <212> TYPE: DNA
 187 <213> ORGANISM: Hepatitis C virus

W--> 188 <400> SEQUENCE: 22
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 190 acgacggtg 69
 192 <210> SEQ ID NO: 23
 193 <211> LENGTH: 28
 194 <212> TYPE: PRT
 195 <213> ORGANISM: Hepatitis C virus

W--> 196 <400> SEQUENCE: 23
 197 Pro Lys Pro Gln Arg Lys Thr Lys Arg Asn Thr Ile Arg Arg Pro Gln
 198 1 5 10 15
 199 Asp Val Lys Phe Pro Gly Gly Gln Ile Val Gly
 200 20 25
 201 <210> SEQ ID NO: 24
 202 <211> LENGTH: 28
 203 <212> TYPE: PRT
 204 <213> ORGANISM: Hepatitis C virus

W--> 205 <400> SEQUENCE: 24
 206 Pro Lys Pro Gln Arg Gln Thr Lys Arg Asn Thr Asn Arg Arg Pro Gln
 207 1 5 10 15
 208 Asp Val Lys Phe Pro Gly Gly Gln Ile Val Gly
 209 20 25
 211 <210> SEQ ID NO: 25
 212 <211> LENGTH: 28
 213 <212> TYPE: PRT
 214 <213> ORGANISM: Hepatitis C virus

W--> 215 <400> SEQUENCE: 25
 216 Pro Lys Pro Gln Arg Lys Thr Lys Arg Asn Thr Tyr Arg Arg Pro Gln
 217 1 5 10 15
 218 Asp Val Lys Phe Pro Gly Gly Gln Ile Val Gly
 219 20 25
 220 <210> SEQ ID NO: 26
 221 <211> LENGTH: 28
 222 <212> TYPE: PRT
 223 <213> ORGANISM: Hepatitis C virus

W--> 224 <400> SEQUENCE: 26
 225 Pro Lys Pro Gln Arg Lys Pro Asn Arg Asn Thr Asn Arg Arg Pro Gln

RAW SEQUENCE LISTING
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Input Set : A:\W121280.txt
Output Set: N:\CRF3\02042002\I491146A.raw

226 1 5 10 15
227 Asp Val Lys Phe Pro Gly Gly Gln Ile Val Gly
228 20 25
229 <210> SEQ ID NO: 27
230 <211> LENGTH: 28
231 <212> TYPE: PRT
232 <213> ORGANISM: Hepatitis C virus
W--> 233 <400> SEQUENCE: 27
234 Pro Lys Pro Gln Arg Gln Pro Lys Arg Asn Thr Pro Arg Arg Pro Gln
235 1 5 10 15
236 Asp Val Lys Phe Pro Gly Gly Gln Ile Val Gly
237 20 25
239 <210> SEQ ID NO: 28
240 <211> LENGTH: 28
241 <212> TYPE: PRT
242 <213> ORGANISM: Hepatitis C virus
W--> 243 <400> SEQUENCE: 28
244 Pro Lys Pro Gln Arg Lys Thr Lys Arg Asn Ala His Arg Arg Pro Gln
245 1 5 10 15
246 Asp Val Lys Phe Pro Gly Gly Gln Ile Val Gly
247 20 25
248 <210> SEQ ID NO: 29
249 <211> LENGTH: 28
250 <212> TYPE: PRT
251 <213> ORGANISM: Hepatitis C virus
W--> 252 <400> SEQUENCE: 29
253 Pro Lys Pro Gln Lys Arg Asn Gln Arg Asn Thr Asn Arg Arg Pro Gln
254 1 5 10 15
255 Asp Val Lys Phe Pro Gly Gly Gln Ile Val Gly
256 20 25
257 <210> SEQ ID NO: 30
258 <211> LENGTH: 28
259 <212> TYPE: PRT
260 <213> ORGANISM: Hepatitis C virus
W--> 261 <400> SEQUENCE: 30
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263 1 5 10 15
264 Asp Val Lys Phe Pro Gly Gly Val Ile Tyr Val
265 20 25
266 <210> SEQ ID NO: 31
267 <211> LENGTH: 28
268 <212> TYPE: PRT
269 <213> ORGANISM: Hepatitis C virus
W--> 270 <400> SEQUENCE: 31
271 Pro Lys Pro Gln Arg Lys Thr Glu Arg Asn Thr Asn Arg Arg Pro Gln
272 1 5 10 15
273 Asp Val Arg Phe Ser Gly Gly Gln Ile Val Gly
274 20 25
275 <210> SEQ ID NO: 32

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/491,146A

DATE: 02/04/2002

TIME: 13:37:24

Input Set : A:\W121280.txt

Output Set: N:\CRF3\02042002\I491146A.raw

L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:18 M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD
L:28 M:283 W: Missing Blank Line separator, <400> field identifier
L:35 M:283 W: Missing Blank Line separator, <400> field identifier
L:43 M:283 W: Missing Blank Line separator, <400> field identifier
L:59 M:283 W: Missing Blank Line separator, <400> field identifier
L:66 M:283 W: Missing Blank Line separator, <400> field identifier
L:74 M:283 W: Missing Blank Line separator, <400> field identifier
L:81 M:283 W: Missing Blank Line separator, <400> field identifier
L:89 M:283 W: Missing Blank Line separator, <400> field identifier
L:97 M:283 W: Missing Blank Line separator, <400> field identifier
L:105 M:283 W: Missing Blank Line separator, <400> field identifier
L:112 M:283 W: Missing Blank Line separator, <400> field identifier
L:120 M:283 W: Missing Blank Line separator, <400> field identifier
L:127 M:283 W: Missing Blank Line separator, <400> field identifier
L:135 M:283 W: Missing Blank Line separator, <400> field identifier
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L:233 M:283 W: Missing Blank Line separator, <400> field identifier
L:243 M:283 W: Missing Blank Line separator, <400> field identifier
L:252 M:283 W: Missing Blank Line separator, <400> field identifier
L:261 M:283 W: Missing Blank Line separator, <400> field identifier
L:270 M:283 W: Missing Blank Line separator, <400> field identifier
L:279 M:283 W: Missing Blank Line separator, <400> field identifier
L:298 M:283 W: Missing Blank Line separator, <400> field identifier
L:306 M:283 W: Missing Blank Line separator, <400> field identifier
L:314 M:283 W: Missing Blank Line separator, <400> field identifier
L:322 M:283 W: Missing Blank Line separator, <400> field identifier
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L:338 M:283 W: Missing Blank Line separator, <400> field identifier
L:346 M:283 W: Missing Blank Line separator, <400> field identifier
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L:363 M:283 W: Missing Blank Line separator, <400> field identifier
L:371 M:283 W: Missing Blank Line separator, <400> field identifier
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L:387 M:283 W: Missing Blank Line separator, <400> field identifier
L:395 M:283 W: Missing Blank Line separator, <400> field identifier
L:403 M:283 W: Missing Blank Line separator, <400> field identifier
L:411 M:283 W: Missing Blank Line separator, <400> field identifier
L:419 M:283 W: Missing Blank Line separator, <400> field identifier

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/491,146A

DATE: 02/04/2002

TIME: 13:37:24

Input Set : A:\W121280.txt

Output Set: N:\CRF3\02042002\I491146A.raw

L:427 M:283 W: Missing Blank Line separator, <400> field identifier
L:434 M:283 W: Missing Blank Line separator, <400> field identifier
L:441 M:283 W: Missing Blank Line separator, <400> field identifier
L:491 M:283 W: Missing Blank Line separator, <400> field identifier